REMARKS

The applicant's responses are preceded by related comments of the examiner reproduced in small bold type.

3. Claims 1-13, 15-17, and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over . Broekhuijsen, Pat. No. 5731820.

Considering claim 1, Broekhuijsen discloses a method comprises "receiving relocation information indicative of an intended change in position of a target location on a Bezier curve shape.... governed by control points" (is equivalently met by fig. 1, item 202, with the arbitrary point is for example point 418 of fig. 4, see col. 13, lines 18-20); and "in response to the relocation information" (i.e., editing feedback), "determining new positions for canonical locations on the Bezier shape based on predefined intended behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations on the Bezier shape being predefined" (is equivalently performed by device 202, see col. 14, lines 40-65, wherein the positions for canonical locations (Pn to Pn+1 or 430-432, see fig. 4), and the predefined behaviors of the canonical locations are determined when the additional inputs are provided to change end point from 418/430 to 432 (col. 14, lines 5 0-54)).

It is to be noted that although Broekhuijsen provides no explicit recitation as to a change in position or relocation of a target location on curve 400, Broekhuijsen suggest that the curve is transformable (col. 14, lines 15-18), and that the processor may edit or change the curve in real

time in response to additional inputs representing new points to be included in the curve (col. 14, lines 39-4 1) or additional inputs for correction or editing provided as feedback (col. 14, lines 49- 51). Thus, based upon this teaching, one of artisan skilled in the art would readily recognize and find it expedient to use the user-specified request of additional inputs for editing to relocate or change the position(s) of a target point on the Bezier shape to a new location, i.e., point 430 to 432.

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the features of Broekhuijsen as such, wherein the relocation information is indicative of a user-specified change in position of any arbitrary target location on a Bezier curve, is provided; in order to provide to the user an ability to continue or alter the curve interactively in real-time. See cot. 5, lines 4-5.

The applicant disagrees, especially with the examiner's contention that the cited portions of Broekhuijsen either disclose or suggest (as recited in the applicant's claim 1): "determining new positions for canonical locations ... based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations on the Bezier curve being predefined."

The examiner's theory appears to be that Broekhuijsen's points Pn and Pn+1 (or 430 and 432) are canonical locations and that Broekhuijsen determines new positions for those canonical

locations based on predefined behaviors of the canonical points when the user indicates that the end point should be moved from 430 to 432.

The first flaw in this theory is that the cited portions of Broekhuijsen's system apparently do not determine new positions for points 430 and 432. To the contrary, the positions of points 430 and 432 are accepted as specified by the user and a resulting curve is determined in a way that permits displaying the curve back to the user in real time. As the passage recited by the examiner says:

> For example, a user may move a pointer associated with the input device 208, seeking to change an end point from 430 to 432 of a curve 400 presented on a screen of a monitor associated with an output device 210. The processor 202 processes that input data ... and provides rendering data ... The output device 210 presents (renders) a new visual image representing the edited curve ..." (emphasis added)

The second flaw in the examiner's theory is that, even if one were somehow to construe Broekhuijsen as determining new positions for points 430 and 432, Broekhuijsen neither discloses nor suggests making that determination based on "predefined behaviors of the canonical locations" as in claim 1. To the contrary, Broekhuijsen represents the curve by an algebraic sum of the building variables and generates a resulting curve by simple multiple and addition for each term. His building variables include, for example, arc lengths calculated by adding chord lengths and coefficients of end points and control points (see passage beginning at column 21, lines 25).

All of the other claims are patentable for at least the same reasons.

The fact that the applicant has addressed certain positions of the examiner in this response should not be construed as a concession with respect to any other positions of the examiner. The fact that the applicant has made certain arguments for the patentability of certain claims should not be construed as a concession by the applicant that there are not other good reasons for the patentability of those claims or other claims.

Applicant asks that all claims be allowed. Please apply any other charges or credits to Deposit Account No. 06-1050, reference 07844-353001.

Respectfully submitted,

Date: 2/3/3

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1. (three times amended) A method comprising

receiving relocation information indicative of a user-specified change in position of any arbitrary target location on a Bezier shape, the Bezier shape being governed by control points, and

in response to the relocation information, determining new positions for canonical locations [on] of the Bezier shape based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations [on] along or across the Bezier shape being predefined.

16. (three times amended) A medium storing machine readable instructions arranged to cause a machine to

receive relocation information indicative of a user-specified change in position of any arbitrary target location on a Bezier shape, the Bezier shape being governed by control points, and

in response to the relocation information, determine new positions for canonical locations [on] of the shape based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations [on] along or across the Bezier shape being predefined.

17. (three times amended) A method comprising

receiving relocation information indicative of a user-specified change in position of any arbitrary target location on a Bezier shape, the Bezier shape being governed by control points,

in response to the relocation information, determining new positions for canonical locations [on] of the shape based on predefined behaviors of the canonical locations, the positions of the canonical locations [on] along or across the Bezier shape being predefined, the predefined intended behaviors being expressed in scaled response functions that define the

relationship between changes in positions of target locations and changes in positions of canonical locations,

adjusting the control points so that the Bezier shape contains the canonical locations in their new positions, and

rendering the Bezier shape based on the new positions of the canonical locations so that the target location in its changed position lies on the rendered Bezier shape.

23. (twice amended) A method comprising

receiving relocation information indicative of a user-specified change in position of a target location on a Bezier curve or surface, the target location not being on a boundary of the curve or surface, the Bezier curve or surface being governed by control points, and

in response to the relocation information, determining new positions for canonical locations [on] of the curve or surface based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations [on] along or across the Bezier shape being predefined.

24. (twice amended) A method comprising

enabling a user to drag a target location on a Bezier curve or surface to indicate a new position for the target location, the target location not being on a boundary of the Bezier surface, the Bezier curve or surface being governed by control points, and

in response to the dragging, determining new positions for canonical locations [on] of the curve or surface based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations [on] along or across the Bezier shape being predefined.